



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of: **YAMAJI, et al.**

Group Art Unit: **3679**

Serial No.: **09/437,296**

Examiner: **DUNWOODY, Aaron M.**

Filed: **November 9, 1999**

P.T.O. Confirmation No.: **7789**

For: **FLUID COUPLING**

SUBMISSION OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

May 14, 2007

Sir:

Submitted herewith is an Appeal Brief in the above-identified U.S. patent application.

Also enclosed is a check in the amount of \$500.00 to cover the cost of filing this Appeal Brief. In the event that any additional fees are due with respect to this paper, please charge Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,
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Enclosures: Appeal Brief
Check in the amount of \$500.00

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THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPEAL BRIEF FOR THE APPELLANTS

Ex parte Michio YAMAJI et al.

FLUID COUPLING

Serial Number: 09/437,296

Filed: November 9, 1999

Group Art Unit: 3679

Examiner: Aaron M. Dunwoody

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Date: May 14, 2007
Atty. Docket No. 991283

**THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Application of: Michio YAMAJI et al.	Appeal No:
Serial No.: 09/437,296	Group Art Unit: 3679
Filed: November 9, 1999	Examiner: Aaron M. Dunwoody
	P.T.O. Confirmation No.: 7789
For: FLUID COUPLING	

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: May 14, 2007

Sir:

This is an appeal from the Office Action dated December 19, 2006 in which claim 1 was rejected.

A Notice of Appeal was timely filed on March 19, 2007.

U.S. Patent Application Serial No. 09/437,296

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the subject application, which is:

FUJIKIN INCORPORATED

3-2, Itachibori-2-chome

Nishi-ku

Osaka-shi

Osaka, Japan

II. RELATED APPEALS AND INTERFERENCES

Appellants know of no other appeals or interference proceedings related to the present appeal.

U.S. Patent Application Serial No. 09/437,296

III. STATUS OF CLAIMS

Claim 1 on appeal is rejected.

U.S. Patent Application Serial No. 09/437,296

IV. STATUS OF AMENDMENTS

All amendments have been entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention relates to fluid couplings, and more particularly to those having a fluid channel which is inclined with respect to a direction orthogonal to the opposed end faces of the component coupling members of the coupling. (Specification, pg. 1, lines 4-8).

Claim 1 on appeal recites a fluid coupling comprising first and second coupling members (valve body 12 and communication channel forming member 31, respectively) having respective gasket holding annular ridges (71a, 72a) on butting end faces thereof; and an annular gasket (73) interposed between the first and second coupling members (12, 31), wherein at least one of the first and second coupling members (12, 31) has a fluid channel (75, 76) comprising an opening passageway (75a, 76a) orthogonal to the butting end face thereof, and a slanting main passageway (75b, 76b) communicating therewith, the opening passageway (75a, 76a) having a diameter equal to the inside diameter of the gasket holding annular ridge (71a, 72a). The gasket holding annular ridges (71a, 72a) are rounded so as to be in contact with flat, non-inclined faces of the gasket (73) only at its radial midportion so as to relieve the inner peripheral portion of the gasket from stress concentration and wrinkles. The gasket (73) has an inside diameter less than the diameter of the opening passageway (75a, 76a). (FIGS. 1(a) and 1(b); Specification, pg. 6, line 16 to pg. 8, line 14).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether or not claim 1 is unpatentable under 35 U.S.C. § 103(a) over U.S. Patent 5,967,489 to Nakazawa et al. (hereafter, "**Nakazawa et al.**") in view of U.S. Patent 5,058,935 to Eidsmore (hereafter, "**Eidsmore**").

VII. ARGUMENT

1. CLAIM 1 ON APPEAL IS NOT OBVIOUS OVER NAKAZAWA ET AL. IN VIEW OF EIDSMORE UNDER 35 U.S.C. §103(a).

FIG. 2 of Nakazawa et al. shows “a seal portion 18 of common construction (not shown in detail) interposed” between first and second fluid coupling members, as disclosed in column 4, lines 22-24. The “seal portion” appears to include an O-ring gasket, but FIG. 2 of Nakazawa et al. fails to show any part of the “seal portion” which corresponds to “gasket holding annular ridges on butting end faces thereof”, as recited in claim 1 on appeal and as represented by members 71a, 72a in FIG. 1(b) of the instant application.

Furthermore, it should be noted that in the prosecution of the corresponding European Application 99122292.8, claim 1 was allowed over the prior art of record with the inclusion of the following language into claim 1 via amendment:

... that the gasket holding ridges are in contact with the gasket at its radial midportion and accordingly the inner peripheral portion of the gasket is free of stress concentration and therefore develops no wrinkles.

This limitation is supported on page 10, lines 17-22 of the specification of the instant application.

The “seal portion” in Nakazawa et al. fails to be rounded so as to be in contact with the gasket only at its radial midportion, as are the ridges 71a, 72a in FIG. 1(b) of the instant application, and as recited in claim 1 of the instant application.

The Examiner has cited **Eidsmore** for teaching this feature.

Appellants respectfully disagree. FIG. 5 of **Eidsmore** shows rounded (“hemispherical”) bead-like protrusions arranged on end faces 26' of coupling components 12', 14'. However, these protrusions are arranged to contact an inner portion of the gasket, and not the radial midportion, as recited in claim 1 on appeal of the instant application. The Examiner appears to ignore this distinction in his remarks. However, FIG. 5 clearly shows contact at a point other than the radial midportion.

Furthermore, FIG. 5 of **Eidsmore** shows the inner diameter of the gasket to be approximately equal to the diameter of the opening passageway. This is in contrast to the present invention, in which the gasket (73) has an inside diameter less than the diameter of the opening passageway, as shown in FIG. 1(b), as disclosed on page 8, lines 10-12 of the specification, and as recited in claim 1, as originally filed, of the present invention.

Lastly, it should be noted that the arrangement of **Eidsmore** produces dead spaces, which are not present in the claimed invention because the end faces of the cylindrical projection 71 (72) are brought into contact with the gasket 73, as shown in Reference Figures A, B attached hereto.

Thus, the 35 U.S.C. § 103(a) rejection of claim 1 on appeal should not be sustained.

U.S. Patent Application Serial No. 09/437,296

For the above reasons, The Board of Patent Appeals and Interferences is therefore respectfully requested to reverse all of the Examiner's rejection of claim 1 on appeal under 35 U.S.C. § 103(a), and pass this application to issue.

In the event this paper is not timely filed, Appellants hereby petitions for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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HANSON & BROOKS, LLP



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PATENT TRADEMARK OFFICE

Enclosures: Claims Appendix
Evidence Appendix
Related Proceedings Appendix

VIII. CLAIMS APPENDIX

1. A fluid coupling comprising:

first and second coupling members having respective gasket holding annular ridges on butting end faces thereof; and

an annular gasket interposed between the first and second coupling members,

wherein at least one of the first and second coupling members has a fluid channel comprising an opening passageway orthogonal to the butting end face thereof, and a slanting main passageway communicating therewith, the opening passageway having a diameter equal to the inside diameter of the gasket holding annular ridge,

wherein the gasket holding annular ridges are rounded so as to be in contact with flat, non-inclined faces of the gasket only at its radial midportion so as to relieve the inner peripheral portion of the gasket from stress concentration and wrinkles and,

wherein the gasket has an inside diameter less than the diameter of the opening passageway.

IX. EVIDENCE APPENDIX

Exhibit 1. REFERENCE FIGURES 1-5 (attached).

Exhibit 2. SHEET B (attached).

Both Exhibit 1 and Exhibit 2 were presented as attachments to Appellants' response filed October 17, 2006, which has been entered into the record by the Examiner as noted on page 2 of the Office Action dated December 14, 2006.

REFERENCE
FIG. 1

REF. FIG.
2

REF. FIG. 3

REF. FIG. 4

REF. FIG. 5

No.	要件			具体的形状
	①	②	③	
1	○	○	○	
2	○	○	×	
3	○	×	○	
4	○	×	×	
5	×	-	-	

present
invention

cited
reference

present invention

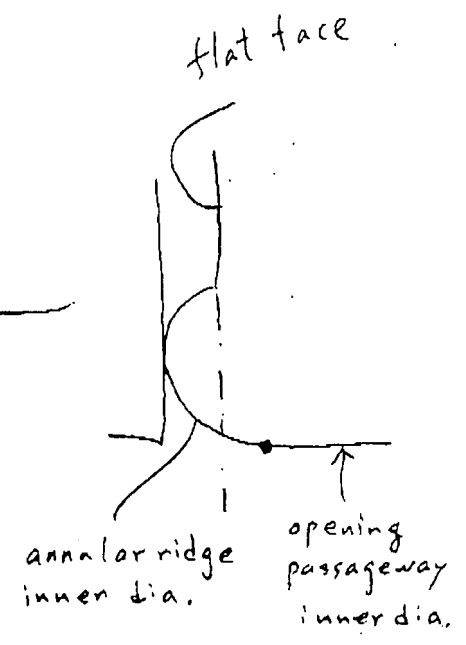
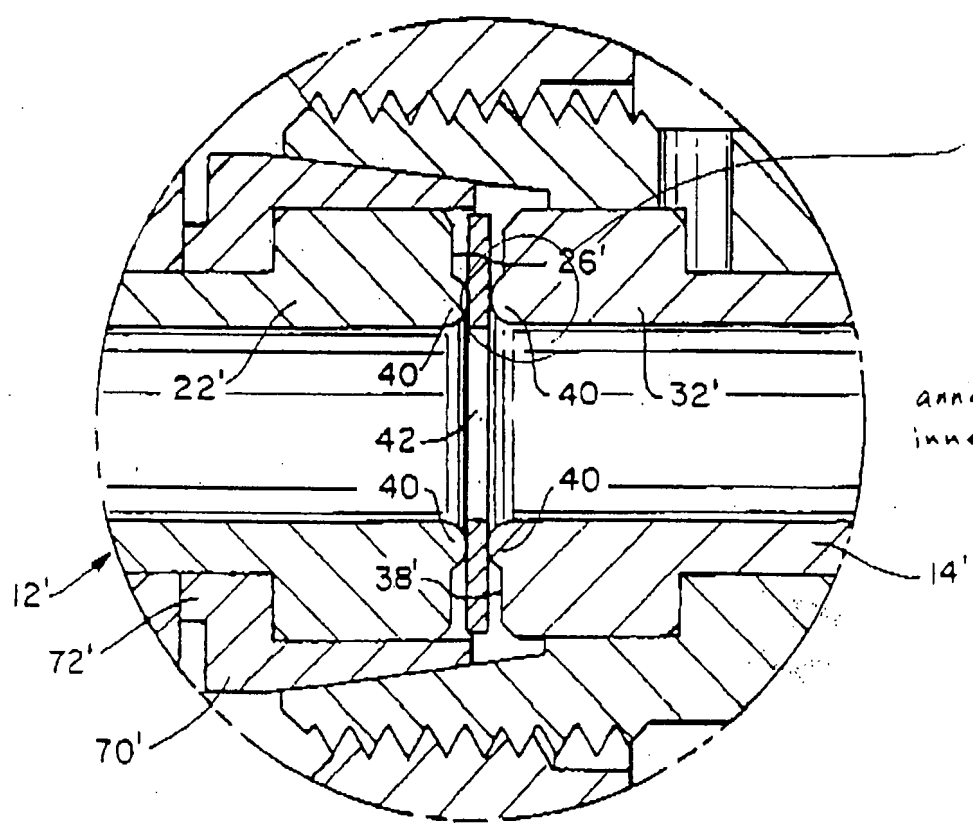
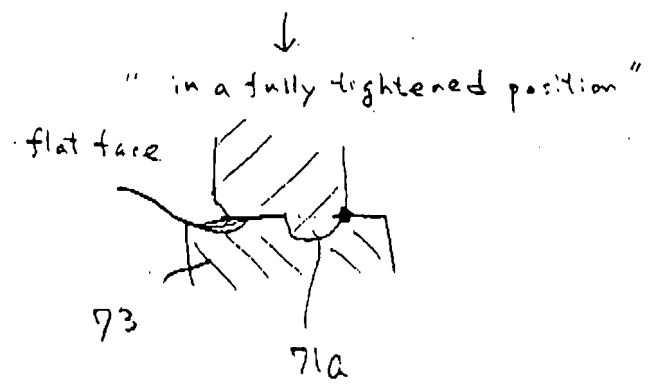
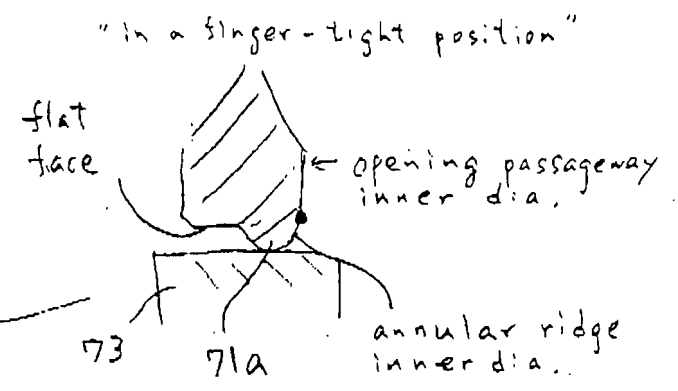
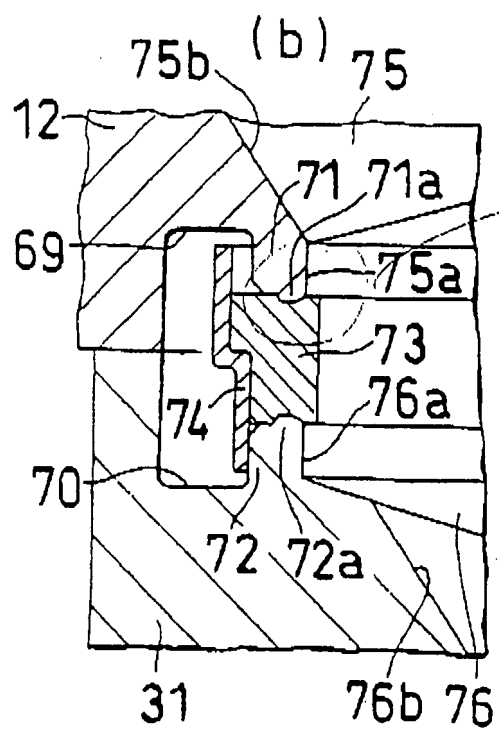


FIG.5 (Eidsmore)

X. RELATED PROCEEDINGS APPENDIX

None.